

PATENT COOPERATION TREATY

PCT


INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D. 14 FEB 2005

WIPO PCT

Applicant's or agent's file reference PPD 70214/WO	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/GB2004/000091	International filing date (day/month/year) 12.01.2004	Priority date (day/month/year) 20.01.2003	
International Patent Classification (IPC) or national classification and IPC A61K7/40			
Applicant SYNGENTA LIMITED et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 16.07.2004		Date of completion of this report 10.02.2005	
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Bertrand, F Telephone No. +49 89 2399-8606	



**INTERNATIONAL PRELIMINARY REPORT
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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-18 as originally filed

Claims, Numbers

1-15 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
 4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-15
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item I

Basis of the report

The documents mentioned herein are numbered in accordance with the order they appear in the International Search Report.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The present invention relates to a method for protecting the skin from noxious effects due to a contact with a bipyridylium herbicide. For this purpose, an alginate is incorporated into the herbicidal composition.

D1 describe such compositions along with emetic/purgative compounds for minimizing the intoxication by ingestion of the bipyridylium herbicides. The contact with skin is not mentioned. D2 mentions (see paragraph 113) that alginates constitute a suitable barrier for protecting the skin from chemical agents. In this case, alginates are implicitly applied to the skin prior to any contact with noxious chemicals. Thus, the present application fulfills the criteria of Article 33(2) PCT, because the claimed subject-matter is new with respect to the prior art as defined in Rule 64(1) to (3) PCT.

The technical problem underlying the present invention with respect to D2 is to suppress the need of a prior skin treatment and to obtain a similar dermal protection when using the noxious composition. This problem has been solved by adding the alginate into the herbicidal composition.

A priori, the presence of the alginate in the herbicidal composition (in other words the presence of the herbicide in the protecting composition) cannot be expected to provide a proper protection, D2 describing the alginate as forming a protective film. A posteriori however, the teaching of D1 has to taken into account. While emetics and purgatives ensure that the composition does not remain within the gastrointestinal tract, the alginate is described as a gelling agent for facilitation the expulsion of the composition. But D1's teaching extends beyond this. On page 9, lines 20-23, it is suggested that alginates entrap the herbicide and release it relatively slowly. This is a prompt for one skilled in the art making use of this property for the skin. Of course, a gelling occurs in the stomach due to low pH, but as known from D2 alginates are film-formers. Hence, it

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seems obvious that a semi-solid form is obtained upon drying on the skin. Thus, a similar protecting effect was expectable and the present application does not fulfill the criteria of Article 33(3) PCT, because the claimed subject-matter does not involve an inventive step (Rule 65(1) and (2) PCT).

The present invention fulfills the criteria of Article 33(4) PCT, because the subject-matter of the present claims is industrially applicable. The presently claimed methods are directed to the protection of the skin but cannot be construed as being prophylactic, because there is no actual treatment of the body but rather a safening of a noxious composition.